## 7160.1 MEAT ADV MSMT 09/13/96

7160.1 09/13/96 OPI: RP/PAD

MEAT PRODUCED BY ADVANCED MEAT/BONE SEPARATION MACHINERY AND MEAT RECOVERY SYSTEMS

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## I. PURPOSE

This directive sets forth inspector responsibilities for verifying that meat produced by advanced meat/bone separation machinery and meat recovery systems complies with regulatory requirements. The directive also sets forth actions to be taken by the inspector when noncompliance with requirements is suspected.

(Paragraphs I-V of this directive are reserved.)

#### BACKGROUND

- A. Product derived from advanced meat/bone separation machinery and meat recovery systems is considered to be "meat," as defined in MPI Regulations, Section 301.2. Two criteria have been established for the definition of "meat" produced by advanced meat/bone separation machinery and meat recovery systems. A maximum calcium content has been established as a measure of process control, and the bones emerging from the advanced recovery systems must be essentially intact and recognizable to assure that the bones are not being crushed, ground, or pulverized. The expectation is that bone and bone constituents (e.g., marrow) in product derived from these systems would not be greater than expected with hand-deboned product.
- B. All existing partial quality control programs and approved procedures for lean meat recovery systems have been rescinded upon publication of changes in the regulations.

# INSPECTOR RESPONSIBILITIES

- A. Ensure establishments follow a compliance program for controlling calcium in finished products, as prescribed in MPI Regulations, Section 318.24.
- B. As assigned by the Performance Based Inspection System, perform Inspection System Guide (ISG) Task 06D06b1/2. This ISG task is new and will be added to the ISG as an amendment. In the interim, this task is included as an Attachment to this directive.
- C. As assigned by the PBIS system, perform ISG task code 06D06b1 by examining establishment records documenting compliance with the calcium limit established for finished product (i.e., product exiting the system) in Section 318.24. If records indicate compliance, take no further action.

If records indicate non-compliance with calcium limits, determine if actions have been taken by the establishment on lots exceeding the limit. If actions have not been taken as required, reject use of the machinery and document a "critical" deficiency.

- D. As assigned by the PBIS system, perform ISG Task code 06D06b2 to verify that the bones emerging from the meat bone separation machinery are in compliance with Section 301.2(rr)(2) (essentially intact and in natural physical conformation such that they are recognizable when they emerge from the machinery).
- 1. Examine a representative sample of bones from one lot (for example, two intact portions of neck bones or two rib bones) before they enter the system to observe their condition and conformation.
- 2. Examine a similar representative sample of bones from the same lot after they emerge from the machinery to determine if they are essentially intact and in the same natural physical conformation as when they entered the system such that they are recognizable (e.g., as neck bones, rib bones, etc.). Bones that emerge in a compacted mass should be disassembled before they are examined. In addition, inspectors should recognize that certain systems presize bones by reducing ingoing bones into smaller, yet recognizable, portions.
- E. If the bones meet the requirements of the regulations, take no further action. If it is clear to the inspector's observation that the bones are crushed, ground or pulverized, classify the deficiency as "critical" and initiate official control action.
- F. When visual observation cannot confirm compliance or non-compliance with the requirements for bones, take a representative sample of bones (for example, two intact portions of neck bones or two rib bones) from ingoing product, a similar representative sample of bones exiting the system, and a 1-pound sample of meat product exiting the system. Notify establishment management that a sample is being taken and that product may be subject to recall. Inspectors should not take official control action at this time. Samples should be sent to:

USDA, FSIS Eastern Laboratory Pathology Section P. O. Box 6085 Athens, GA 30604

G. The Eastern Laboratory will determine if the bones have been crushed, ground, or pulverized. Inspectors will be notified, through channels, of the laboratory's findings and followup actions to take.

H. As directed by headquarters, collect additional samples of products and bones as part of periodic sampling programs or special studies.

Thomas J. Billy for/Administrator

Attachment

The edible meat product derived from advanced meat/bone separation machinery and meat recovery systems must have a calcium content not exceeding 0.15 percent or 150 mg/100 gm of product within a tolerance of 0.03 percent or 30 mg. Establishment compliance program for calcium content requirement is implemented and monitored by the establishment, including corrective and preventive actions as required. Advanced meat recovery system is operated so as not to crush, grind or pulverize bone and bones emerge essentially intact and in natural physical conformation.

FSIS Directive 7160.1, MPI Regulations 301.2, 318.24, 320.1, Plant Calcium Control Program.

Evaluate available records to determine if records indicate compliance with calcium limits and if actions have been taken by establishment on lots exceeding limits.

If results do not meet compliance standards, initiate appropriate action.

Examine a representative sample of bones (for example, two intact portions of neck bones or two rib bones) from one lot, before and after the meat recovery system, to observe their condition and conformation. Compare observation with standard.

If results do not meet compliance standards, initiate appropriate action.

## 80-CHARACTER TASK DESCRIPTION

Task Code		<u>Wt</u>	Risk	<u>Pg#</u>	Time
06D06b1	Eval avail rec (advanc meat/bone sep mach & meat recov sys)	0	6	6-17	2 min
06D06b	Observe sample of bones (entering/ exiting advance meat/bone sep mach & meat recov sys)	26	6	6-17	15 min

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